Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of removing harmful gases from an automobile exhaust containing NO_x , CO, and hydrocarbons the method comprising:

contacting a NO_X trap composition with a first exhaust gas mixture at a temperature of at least 200°C, the first exhaust gas mixture comprising exhaust gases from an internal combustion engine operating in a fuel-lean condition and the NO_X trap composition comprising:

a precious metal;

a NO_x absorber material;

an oxide that inhibits the decrease in NO_X storing ability of the NO_X trap composition, wherein proximity between oxidizing components and trapping components is optimized to maximize spillover; and

a support material; and

contacting the NO_X trap composition with a second exhaust gas composition at a temperature of at least 200°C, the second exhaust gas mixture comprising exhaust gases from an internal combustion engine operating in a fuel-rich condition.

- 2. (Original) The method of claim 1 wherein the oxide that inhibits the decrease in NO_X storing ability of the NO_X trap composition is selected from the group consisting of oxides of magnesium, oxides of manganese, and combinations thereof.
- 3. (Original) The method of claim 1 wherein the oxide that inhibits the decrease in NO_X storing ability of the NO_X trap composition is present in an amount from about 1 to 30% of the total weight of the NO_X trap washcoat.

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- 4. (Original) The method of claim 1 wherein the oxide that inhibits the decrease in NO_X storing ability of the NO_X trap composition is present in an amount from about 5 to 20% of the total weight of the NO_X trap washcoat.
- 5. (Original) The method of claim 1 wherein the oxide that inhibits the decrease in NO_X storing ability of the NO_X trap composition is present in an amount from about 5 to 15% of the total weight of the NO_X trap washcoat.
- 6. (Original) The method of claim 1 wherein the NO_x absorber is selected from the group consisting of oxides of alkali metals, oxides of alkaline earth metals, oxides of rare earth metals, and combinations thereof.
- 7. (Original) The method of claim 1 wherein the NO_X absorber is selected from the group consisting of cesium oxide, praseodymium oxide, strontium oxide, barium oxide, and combinations thereof.
- 8. (Original) The method of claim 1 wherein the precious metal is a metal selected from the group consisting of platinum, palladium, rhodium, and combinations thereof.
- 9. (Original) The method of claim 1 wherein the NO_X trap composition is applied to a substrate.
 - 10. (Original) The method of claim 9 wherein the substrate is cordierite.
- 11. (Original) The method of claim 9 wherein the NO_X trap composition is applied to the substrate by washcoating.
- 12. (Original) A vehicle exhaust system implementing the method of claim 1.

- 13. (Currently Amended) A thermally stable NO_X trap composition comprising:
 - a support material;
 - a NO_x absorber material;

an oxide selected from the group consisting of oxides of magnesium, oxides of manganese, and combinations thereof in sufficient contact with the NO_X absorber that a NO_X trap incorporating the NO_X trap composition has a NO_X storage efficiency of at least 5% at a temperature of 400°C after aging of the NO_X trap, wherein proximity between oxidizing components and trapping components is optimized to maximize spillover; and

a precious metal in contact with the NO_X material.

- 14. (Original) The composition of claim 13 wherein the NO_X absorber is selected from the group consisting of oxides of alkali metals, oxides of alkaline earth metals, oxides of rare earth metals, and combinations thereof.
- 15. (Original) The composition of claim 13 wherein the NO_X absorber is selected from the group consisting of cesium oxide, praseodymium oxide, strontium, barium oxide, and combinations thereof.
- 16. (Original) The composition of claim 13 wherein the precious metal is a metal selected from the group consisting of platinum, palladium, rhodium, and combinations thereof.
- 17. (Original) The composition of claim 13 wherein the oxide is present in an amount from about 1 to 30% of the total weight of the NO_X trap washcoat.
 - 18. (Original) The composition of claim 13 applied to a substrate.
- 19. (Original) The composition of claim 18 wherein the substrate is cordierite.

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20. (Original) A vehicle exhaust system comprising a NO_X trap that includes the composition of claim 13.

21. (Currently Amended) A method of removing harmful gases from an automobile exhaust containing NO_x , CO, and hydrocarbons the method comprising:

contacting a NO_X trap composition with a first exhaust gas mixture at a temperature of at least 200°C, the first exhaust gas mixture comprising exhaust gases from an internal combustion engine operating in a fuel-lean condition and the NO_X trap composition comprising:

a precious metal;

barium oxide;

a oxide that inhibits the decrease in NO_X storing ability of the barium

oxide; and

a support material, wherein proximity between oxidizing components and trapping components is optimized to maximize spillover; and

contacting the NO_X trap composition with a second exhaust gas composition, the second exhaust gas mixture comprising exhaust gases from an internal combustion engine operating in a fuel-rich condition.